

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1 1 . (Original) A method for proactively managing a fault in a video and data
2 network comprising:
3 collecting network correlation data for the fault;
4 automatically performing a physical connectivity test of the video and data
5 network;
6 collecting physical connectivity data from the physical connectivity test;
7 automatically performing a virtual connectivity test of the video and data
8 network;
9 collecting virtual connectivity data from the virtual connectivity test;
10 automatically correlating the network correlation data, physical connectivity data,
11 and virtual connectivity data based on the fault; and
12 providing a defined resolution procedure for resolving the fault using the
13 correlated network correlation data, physical connectivity data, and virtual connectivity data.

1 2. (Original) The method of claim 1, wherein the video and data network
2 comprises a Digital Subscriber Line (xDSL) network.

1 3. (Original) The method of claim 1, wherein the video and data network
2 comprises a Very high bit rate DSL (VDSL) network.

1 4. (Original) The method of claim 1, wherein collecting network correlation
2 data comprises collecting data for upstream and downstream physical network elements from the
3 fault.

1 5. (Original) The method of claim 1, wherein collecting network correlation
2 data comprises collecting data from a root cause analysis.

1 6. (Original) The method of claim 1, wherein the physical connectivity test
2 comprises a Physical Loop Test.

1 7. (Original) The method of claim 1, wherein the Physical Loop Test is de-
2 coupled from a Plain Old Telephone Service (POTS) tool.

1 8. (Original) The method of claim 1, wherein the virtual connectivity test
2 comprises an Operations And Maintenance (OAM) test.

1 9. (Original) The method of claim 1, further comprising initiating the OAM
2 test with a service area identifier.

1 10. (Original) The method of claim 1, wherein the service area identifier
2 comprises a telephone number.

1 11. (Original) The method of claim 1, further comprising creating a repair
2 ticket for the fault.

1 12. (Original) The method of claim 1, further comprising dispatching a
2 technician to fix the fault.

1 13. (Original) The method of claim 1, further comprising fixing the fault using
2 the pre-defined resolution procedure.

1 14. (New) An apparatus for proactively managing a fault in a video and data
2 network comprising:

3 logic to collect network correlation data for the fault;
4 logic to automatically perform a physical connectivity test of the video and data
5 network;
6 logic to collect physical connectivity data from the physical connectivity test;
7 logic to automatically perform a virtual connectivity test of the video and data
8 network;
9 logic to collect virtual connectivity data from the virtual connectivity test;
10 logic to automatically correlate the network correlation data, physical connectivity
11 data, and virtual connectivity data based on the fault; and
12 logic to provide a defined resolution procedure for resolving the fault using the
13 correlated network correlation data, physical connectivity data, and virtual connectivity data.

1 15. (New) The apparatus of claim 14, wherein the video and data network
2 comprises a Digital Subscriber Line (xDSL) network.

1 16. (New) The apparatus of claim 14, wherein the video and data network
2 comprises a Very high bit rate DSL (VDSL) network.

1 17. (New) The apparatus of claim 14, wherein the logic to collect network
2 correlation data comprises collecting data for upstream and downstream physical network
3 elements from the fault.

1 18. (New) The apparatus of claim 14, wherein the logic to collect network
2 correlation data comprises collecting data from a root cause analysis.

1 19. (New) The apparatus of claim 14, wherein the physical connectivity test
2 comprises a Physical Loop Test.

1 20. (New) The apparatus of claim 14, wherein the Physical Loop Test is de-
2 coupled from a Plain Old Telephone Service (POTS) tool.

1 21. (New) The apparatus of claim 14, wherein the virtual connectivity test
2 comprises an Operations And Maintenance (OAM) test.

1 22. (New) The apparatus of claim 14, further comprising logic to initiate the
2 OAM test with a service area identifier.

1 23. (New) The apparatus of claim 14, wherein the service area identifier
2 comprises a telephone number.

1 24. (New) The apparatus of claim 14, further comprising logic to create a
2 repair ticket for the fault.

1 25. (New) The apparatus of claim 14, further comprising logic to dispatch a
2 technician to fix the fault.

1 26. (New) The apparatus of claim 14, further comprising logic to fix the fault
2 using the pre-defined resolution procedure.

1 27. (New) A method for proactively managing a fault in a video and data
2 network comprising:
3 receiving an indication of a fault;
4 collecting network correlation data for the fault, wherein the network correlation
5 data indicates a network device that is causing the fault;
6 automatically performing a physical connectivity test of the video and data
7 network based on the network device in response to receiving the indication of the fault;
8 collecting physical connectivity data from the physical connectivity test;

9 automatically performing a virtual connectivity test of the video and data network
10 based on the network device in response to receiving the indication of the fault;
11 collecting virtual connectivity data from the virtual connectivity test;
12 automatically correlating the network correlation data, physical connectivity data,
13 and virtual connectivity data based on the fault in response to receiving the indication of the
14 fault; and
15 providing a defined resolution procedure for resolving the fault, wherein the
16 defined resolution procedure is determined based on the correlated network correlation data,
17 physical connectivity data, and virtual connectivity data.

1 28. (New) The method of claim 27, further comprising:
2 receiving a plurality of faults; and
3 isolating the fault in the plurality of faults, the fault being a root cause of faults in
4 the plurality of faults.

1 29. (New) The method of claim 27, wherein the network device can be
2 physical or logical.

1 30. (New) The method of claim 27, wherein the defined resolution procedure
2 comprises re-routing customers affected by the fault to a route not including the network device.